

appended claims are expressed. To the extent that these various modifications do not depart from the spirit and scope of the appended claims, they are intended to be encompassed therein.

What is claimed is:

1. A method of treating a subject having vasomotor symptoms associated with estrogen deficiency, the method comprising administering to the subject an effective amount of a pharmaceutical composition comprising:

about 0.25 mg estradiol, wherein at least 80% of the estradiol in the composition is solubilized estradiol; progesterone, wherein the progesterone comprises suspended progesterone; and

a medium-chain oil comprising medium chain fatty acid esters of glycerol, polyethylene glycol, or propylene glycol, or mixtures thereof, wherein the medium chain fatty acid esters are predominantly esters of C6 to C12 fatty acids, and wherein the entire amount of the estradiol and the progesterone in the composition is present in the oil;

wherein administration of the composition to the subject produces, in a plasma sample from the subject, one or more parameters selected from:

(i) an area under the curve  $(AUC)_{(0-t)}$  for estradiol that is from 140.3733 pg-hr/ml to 219.3333 pg-hr/ml; and  
(ii) a  $C_{max}$  for estradiol that is from 6.4790 pg/ml to 10.1235 pg/ml.

2. The method of claim 1, wherein the subject is female.

3. The method of claim 1, wherein the subject is a woman having a uterus.

4. The method of claim 1, wherein administration of the composition to the subject produces both an  $AUC_{(0-t)}$  for estradiol that is from 140.3733 pg-hr/ml to 219.3333 pg-hr/ml and a  $C_{max}$  for estradiol that is from 6.4790 pg/ml to 10.1235 pg/ml.

5. The method of claim 1, wherein administration of the composition to the subject further produces, in a plasma sample from the subject, one or both parameters selected from:

(i) an  $AUC_{(0-t)}$  for progesterone that is from 24.0174 ng-hr/ml to 37.5272 ng-hr/ml; and  
(ii) a  $C_{max}$  for progesterone that is from 17.8444 ng/ml to 27.8819 ng/ml.

6. The method of claim 1, wherein administration of the composition to the subject further produces, in a plasma sample from the subject, one or both parameters selected from:

(i) an  $AUC_{(0-t)}$  for estrone that is from 909.6091 pg-hr/ml to 1421.2642 pg-hr/ml; and  
(ii) a  $C_{max}$  for estrone that is from 42.6549 pg/ml to 66.6483 pg/ml.

7. The method of claim 1, wherein administration of the composition to the subject further produces, in a plasma sample from the subject, one or both parameters selected from:

(i) an  $AUC_{(0-t)}$  for total estrone that is from 20.1752 ng-hr/ml to 31.5238 ng-hr/ml; and  
(ii) a  $C_{max}$  for total estrone that is from 3.5429 ng/ml to 5.5358 ng/ml.

8. A method of treating a subject having vasomotor symptoms associated with estrogen deficiency, the method comprising administering to the subject an effective amount of a pharmaceutical composition comprising:

about 0.5 mg estradiol, wherein at least 80% of the estradiol in the composition is solubilized estradiol; progesterone, wherein the progesterone comprises suspended progesterone; and

a medium-chain oil comprising medium chain fatty acid esters of glycerol, polyethylene glycol, or propylene glycol, or mixtures thereof, wherein the medium chain fatty acid esters are predominantly esters of C6 to C12 fatty acids, and wherein the entire amount of the estradiol and the progesterone in the composition is present in the oil;

wherein administration of the composition to the subject produces, in a plasma sample from the subject, one or more parameters selected from:

(i) an area under the curve  $(AUC)_{(0-t)}$  for estradiol that is from 280.7467 pg-hr/ml to 438.6667 pg-hr/ml; and  
(ii) a  $C_{max}$  for estradiol that is from 12.9580 pg/ml to 20.2469 pg/ml.

9. The method of claim 8, wherein administration of the composition to the subject further produces, in a plasma sample from the subject, one or both parameters selected from:

(i) an  $AUC_{(0-t)}$  for estrone that is from 1819.2181 pg-hr/ml to 2842.5283 pg-hr/ml; and  
(ii) a  $C_{max}$  for estrone that is from 85.3098 pg/ml to 133.2966 pg/ml.

10. The method of claim 8, wherein administration of the composition to the subject further produces, in a plasma sample from the subject, one or both parameters selected from:

(i) an  $AUC_{(0-t)}$  for total estrone that is from 40.3505 ng-hr/ml to 63.0476 ng-hr/ml; and  
(ii) a  $C_{max}$  for total estrone that is from 7.0858 ng/ml to 11.0715 ng/ml.

11. The method of claim 8, wherein administration of the composition to the subject further produces, in a plasma sample from the subject, one or more parameters selected from:

(i) an  $AUC_{(0-t)}$  for progesterone that is from 48.0348 ng-hr/ml to 75.0543 ng-hr/ml; and  
(ii) a  $C_{max}$  for progesterone that is from 35.6889 ng/ml to 55.7639 ng/ml.

12. A method of treating a subject having vasomotor symptoms associated with estrogen deficiency, the method comprising administering to the subject an effective amount of a pharmaceutical composition comprising:

about 1 mg estradiol, wherein at least 80% of the estradiol in the composition is solubilized estradiol; progesterone, wherein the progesterone comprises suspended progesterone; and

a medium-chain (C6-C12) oil comprising medium chain fatty acid esters of glycerol, polyethylene glycol, or propylene glycol, or mixtures thereof, wherein the medium chain fatty acid esters are predominantly esters of C6 to C12 fatty acids, and wherein the entire amount of the estradiol and the progesterone in the composition is present in the oil;

wherein administration of the composition to the subject produces, in a plasma sample from the subject, one or more parameters selected from:

(i) an area under the curve  $(AUC)_{(0-t)}$  for estradiol that is from 561.4933 pg-hr/ml to 877.3333 pg-hr/ml; and  
(ii) a  $C_{max}$  for estradiol that is from 25.9161 pg/ml to 40.4939 pg/ml.

13. The method of claim 12, wherein administration of the composition to the subject further produces, in a plasma sample from the subject, one or both parameters selected from:

(i) an  $AUC_{(0-t)}$  for estrone that is from 3638.4363 pg-hr/ml to 5685.0567 pg-hr/ml; and